## **Recovery Plan Action Status**

Plan Name: Seven Coastal Plants and the Myrtle's Silverspot Butterfly Recovery Plan

Plan Status: Final Plan Date: 29-Sep-98 Lead Agency: USFWS

Lead Office: Ventura Fish And Wildlife Office 644-1766)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Menzies' wallflower (Erysimum menziesii)	1	1.61	Inform land owners - Erysimum menziesii	Ongoing Current	FY 1995 - FY 1999		Local Lead Agencies [California coast, Myrtle's Silverspot/Seven coastal plants habitat]	Other: Regulations	Labor type not yet selected	Protect habitat: Monterey, Mendocino, and Humbolt Counties; Coastal Commission and Local Coastal Plan staff conduct routine notification of landowners during the project development permitting process
Menzies' wallflower (Erysimum menziesii)	1	1.62	Consult agencies - Erysimum menziesii	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service	Management: Habitat Maintenance and Manipulation, Research: Habitat Status, Research: Population Surveys	Internal Field Assistance	Multiple agency coordination in monitoring and mgmt across Humboldt, Mendocino, Monterey Counties involving BLM, USFWS, California State Parks, and private NGO's.
Menzies' wallflower (Erysimum menziesii), Howell's spineflower (Chorizanthe howellii), Monterey spineflower (Chorizanthe pungens var. pungens), Myrtle's silverspot butterfly (Speyeria zerene myrtleae), Monterey gilia (Gilia tenuiflora ssp. arenaria), Clover lupine (Lupinus tidestromii), Beach layia (Layia carnosa)		2.11	Minimize invasive plant threats on private land	Partially Complete			U.S. Bureau of Land Management	Work type not yet selected	Labor type not yet selected	Habitat restoration (exotics removal) has been ongoing by NGO's for many years at Humboldt Bay and Monterey Bay for Erysimum menziesii and/or Layia carnosa.

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										lupine was removed (which is known to facilitate invasion by non- native species by increasing nitrogen and organic content).
Menzies' wallflower (Erysimum menziesii), Howell's spineflower (Chorizanthe howellii), Monterey spineflower (Chorizanthe pungens var. pungens), Monterey gilia (Gilia tenuiflora ssp. arenaria), Clover lupine (Lupinus tidestromii), Sonoma spineflower (Chorizanthe valida), Beach layia (Layia carnosa)		3.1	Examine the interactions of cattle grazing on listed plant habitat	Not Started			To be determined	Work type not yet selected	Labor type not yet selected	

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										Genetic study by Brinegar and Baron (2009) indicates that C. pungens/C. robusta complex is genetically very similar, and that taxonomic revision to include all varieties of this complex as two varieties of C. pungens may be warranted in the future (Lena Chang 7/29/2010). Extensive research conducted on life history of Erysimum menziesii, Layia carnosa and Chorizanthe howelii over the past decade.
Menzies' wallflower (Erysimum menziesii), Howell's spineflower (Chorizanthe howellii), Monterey spineflower (Chorizanthe pungens var. pungens), Monterey gilia (Gilia tenuiflora ssp. arenaria), Clover lupine (Lupinus tidestromii), Sonoma spineflower (Chorizanthe valida), Beach layia (Layia carnosa)		3.4	Determine habitat requirements for plants	Ongoing Current	FY 1995 - FY 1999			Research: Habitat Requirements	Internal Field Assistance	
Menzies' wallflower (Erysimum menziesii)	2	3.6	Investigate crucifer rust for Eyrsimum menziesii	Ongoing Not Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service	Research: Disease	Contract, Internal Field Assistance	Extensive demographic data collected in 1998 remains to be analyzed to assess the impacts of crucifer rust on Humboldt Bay spp. (eurekense) viability.

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Menzies' wallflower (Erysimum menziesii)	2	4.71	Establish working group -Erysimum menziesii	Not Started			U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	No working group has been formerly convened. The AFWO and VFWO continue to work with BLM, State Parks and other local entities to conduct recovery, restoration, protection, and management activities.
Menzies' wallflower (Erysimum menziesii)	2	4.72	Implement guidelines - Erysimum menziesii	Ongoing Current	FY 2006		U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	General recovery Efforts: State Parks coninues management efforts at Marina State Beach and Asilomar, including caging, benefitting Yadon's wallflower and other sensitive plants and Smith's blue butterfly. LightStation Point Pinos/Pacific Grove Municipal golf course continuing restoration required as part of the city acquision of the Point. Habitat restoration efforts and species management efforts continuing at Humboldt Bay include the South Spit (BLM), Humboldt Bay National Wildlife Refuge, private lands and Manila CSD.

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Menzies' wallflower (Erysimum menziesii), Howell's spineflower (Chorizanthe howellii), Monterey spineflower (Chorizanthe pungens var. pungens), Myrtle's silverspot butterfly (Speyeria zerene myrtleae), Monterey gilia (Gilia tenuiflora ssp. arenaria), Clover lupine (Lupinus tidestromii), Sonoma spineflower (Chorizanthe valida), Beach layia (Layia carnosa)	3	5.3	Survey likely habitat	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, To be determined	Work type not yet selected	Labor type not yet selected	Routine surveys conducted as required as part of project planning efforts at state and federal levels across the ranges of the species.

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